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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,201	09/09/2003	Fox John Herrington	4393-008	9136

7590

06/06/2006

INTELLECTUAL PROPERTY LAW OFFICE OF  
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EXAMINER
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HEWITT, JAMES M

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 06/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/657,201	<b>Applicant(s)</b> HERRINGTON, FOX JOHN	
	<b>Examiner</b> James M. Hewitt	<b>Art Unit</b> 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 8/31/05, 9/7/05, 12/12/05 & 3/15/06.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-15 and 64-69 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-15 and 64-69 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Specification*

Applicant is reminded of the proper language for an abstract of the disclosure.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

On line 1, "This is a" should be replaced with "A".

The disclosure is objected to because of the following informalities:

On page 15, line 30, "54" should be inserted after "end" and "pipe 54" should be replaced with "pipe".

On page 16, lines 6-7, "64" should be inserted after "end" and "pipe 64" should be replaced with "pipe".

Appropriate correction is required.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the rib members define hollow cells; the densities of the

single wall portions are greater than the densities of the uncompressed portions of the first and second length of pipe.

### ***Claim Objections***

Claims 1-6, 8-15 and 64-69 are objected to because of the following informalities:

In claim 1, line 10, it is unclear as to what is meant by "substantially hollow".

In claim 1, line 14, "first length of" should be inserted before "pipe".

In claim 1, line 19, "second length of" should be inserted before "pipe".

In claim 1, line 22, "the single wall portion" lacks proper antecedent basis.

In claim 1, line 23, "the single wall portion" lacks proper antecedent basis.

In claim 1, line 24, "bulk" should be replaced with "respective".

In claim 1, line 24, "said single wall portions" lacks proper antecedent basis.

In claim 1, line 25, "bulk" should be replaced with "respective".

In claim 1, line 25, "portions of the" should be inserted before "first".

In claim 2, lines 2-4, the recitation "and define a plurality of substantially hollow cells...inner surface and outer surface" should be related to the recitation "wherein the next adjacent rib members...substantially hollow cells" on lines 9-10 of claim 1.

In claim 2, line 2, it is unclear as to what is meant by "substantially hollow".

In claim 4, lines 1-2, "said single wall portion" lacks proper antecedent basis.

In claim 4, line 2, "said second tubular member" lacks proper antecedent basis.

In claim 4, line 2, "said single wall portion" lacks proper antecedent basis.

In claim 4, line 3, "said first tubular member" lacks proper antecedent basis.

In claim 5, line 2, "said single wall portion" lacks proper antecedent basis.

In claim 5, line 2, "said first tubular member" lacks proper antecedent basis.

In claim 5, line 3, "said single wall portion" lacks proper antecedent basis.

In claim 5, line 3, "said second tubular member" lacks proper antecedent basis.

In claim 6, lines 1-2, "said single wall portion" lacks proper antecedent basis.

In claim 6, lines 4-5, "said portions of said outer tubular member, said inner tubular member and said rib members portions" lacks proper antecedent basis.

In claim 6, line 6, "said single wall portion" lacks proper antecedent basis.

In claim 8, line 2, "said single tubular wall portions" lacks proper antecedent basis.

In claim 9, line 14, "bulk" should be deleted.

In claim 9, line 15, "bulk" should be deleted.

In claim 65, it is unclear as to how the pipe length can be characterized as a monolith, which is defined as: 1 : a single great stone often in the form of an obelisk or column 2 : a massive structure 3 : an organized whole that acts as a single unified powerful or influential force.

In claim 66, line 2, it is unclear as to what is meant by "substantially hollow".

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 65, 67 and 69 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claim 65, stating that the length of pipe is in the form of a monolith constitutes new matter not supported by the original disclosure.

In claim 67, stating that the pipe length comprises a unitary structure having no seams constitutes new matter not supported by the original disclosure.

In claim 69, stating that the single tubular wall is without seaming constitutes new matter not supported by the original disclosure.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4-6, 9, 11-12, 65-67 and 69 are rejected under 35 U.S.C. 102(b) as being anticipated by Hall (US 1,330,316).

Hall discloses an assembly of a first length of pipe (bottom pipe in Fig. 2) axially joined to a second length of pipe (top pipe in Fig. 2): wherein said pipes each comprise a hollow inner tubular member (14) having a thickness, an outer tubular member (10),

having a thickness, radially spaced apart from said inner tubular wall, and has a plurality of rib members (defined by 12) disposed in the hollow space between said inner tubular wall and said outer tubular wall in a supporting relationship to both said walls; wherein a portion of said first length of pipe, proximate to and including an end thereof is compressed into a single tubular wall having a thickness that is greater than the thickness of either said outer tubular wall or said inner tubular wall and having an inside diameter that is greater than the inside diameter of the remainder of said pipe; wherein a portion of the second length of pipe, proximate to and including an end thereof, is compressed into a single tubular wall having a thickness that is greater than the thickness of either said outer wall or said inner wall and having an outside diameter that is less than the outside diameter of the remainder of said pipe; and wherein the outside diameter of the single wall portion of the second length of pipe is not larger than the inside diameter of the single wall portion of the first length of pipe; wherein said single wall portion of said second length of pipe is inserted within said single wall portion of said first length of pipe; wherein the inside diameter of said single wall portion of said first tubular wall and the outside diameter of said single wall portion of said second tubular wall are substantially the same; wherein said single wall portion of said inner tubular wall comprises a part of said inner tubular wall of the same length as said portion, a portion of said ribs disposed in said portion, and a part of said outer tubular wall of the same length as said portion.

With respect to claim 6, the method of forming the device (as by melting) is not germane to the issue of patentability of the device itself.

With respect to claim 65, one of Hall's pipe lengths is in the form of a monolith inasmuch as one of Applicant's pipe lengths is in the form of a monolith.

With respect to claim 67, one of Hall's pipe lengths comprises a unitary structure without seams inasmuch as one of Applicant's pipe lengths comprises a unitary structure without seams.

With respect to claim 69, the method of forming the device (as by extrusion and compression) is not germane to the issue of patentability of the device itself.

Claims 9-13, 65-67 and 69 are rejected under 35 U.S.C. 102(b) as being anticipated by Line (US 690,744).

With respect to claim 9, Line discloses a length of pipe (excluding flanges 4, 5) comprising an inner tubular wall (between A and member 2), and hollow outer tubular wall (3) radially spaced from said inner tubular wall, and a plurality of rib members (of 2) disposed in the hollow space between and in supporting relationship to said inner and outer tubular walls; further comprising an end of said pipe length and a portion of said pipe proximate to said end consisting of a single wall comprising, in combination, the amount of said inner tubular wall of said portion, the amount of said outer tubular wall of said portion and the amount of rib members in said portion; and wherein said inner tubular wall of said portion, said outer tubular wall of said portion and said rib members in said portion are compressed together to form said single wall; wherein adjacent rib members and portions of inner and outer tubular members intercepted thereby make up



substantially hollow cells; wherein the compressed single wall member has a density that is greater than the density of an uncompressed portion of the length of pipe.

With respect to claim 10, further comprising said end structure at both ends of said pipe.

With respect to claim 11, wherein said single wall has an outside diameter that is substantially the same as the outside diameter of the remainder of said length of pipe (as at bottom end of pipe length in Figure 2).

With respect to claim 12, wherein said single wall has an inside diameter that is substantially the same as the inside diameter of the remainder of said length of pipe (as at top end of pipe length in Figure 2).

With respect to claim 13, wherein said single wall at one end of said pipe has an outside diameter that is substantially the same as the outside diameter of the remainder of said pipe and the single wall at the other end of said pipe has an inside diameter that is substantially the same as the inside diameter of the remainder of said pipe. Refer to Figure 2.

With respect to claim 65, Line's pipe length is in the form of a monolith inasmuch as one of Applicant's pipe lengths is in the form of a monolith.

With respect to claim 66, wherein said pipe length is substantially hollow in at least some of the areas bounded by said rib members and said inner and outer surfaces.

With respect to claim 67, Line's pipe length comprises a unitary structure without seams inasmuch as one of Applicant's pipe lengths comprises a unitary structure without seams.

With respect to claim 69, the method of forming the device (as by extrusion and compression) is not germane to the issue of patentability of the device itself.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-3, 64 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hall (US 1,330,316) in view of Herrington (US 6,405,974).

Hall fails to teach that the ribs are helically oriented or slantedly joined to the inner and outer walls at an angle that is not normal to a tangent to said tubular members at the point where the rib is joined to said tubular wall. Herrington teaches a pipe length having inner and outer walls having a plurality of helical ribs therebetween to provide increased strength and stability for the pipe. In view of Herrington's teaching, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Hall's ribs with helical ribs in order to provide increased strength and stability.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hall (US 1,330,316) in view of Harry et al (US 3,379,221).

Hall fails to teach that the ribs are slantedly joined to the inner and outer walls at an angle that is not normal to a tangent to said tubular members at the point where the rib is joined to said tubular wall. Harry et al teaches a pipe length having inner and outer walls having a plurality of ribs in various orientations therebetween to provide increased strength and stability for the pipe. In view of Harry et al's teaching, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Hall's ribs with slanted ribs in order to provide increased strength and stability.

Claims 8, 10 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hall (US 1,330,316).

With respect to claim 8, Hall fails to teach a gasket in between at least a portion of proximate single wall portions. As Applicant did not challenge or refute the Examiner's taking of official notice of the use of a gasket between pipe sections in order to effectively seal the pipe sections, such is considered to be admitted prior art. And it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a gasket between at least a portion of proximate single wall portions of Hall in order to provide sealing between the portions.

With respect to claims 10 and 13-15, Hall does not teach a single wall member at both ends of his pipe length or the variants thereof as posited in claims 13-15.

Nevertheless, it would have been an obvious matter of design choice to employ such single wall configurations at each end of the pipe since Applicant has not disclosed that doing so is for any particular purpose.

Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Line (US 690,744).

Line fails to teach that the single walls at each end of the pipe have inside diameters that are substantially the same as the inside diameter of the remainder of the pipe, and that single walls at each end of the pipe have outside diameters that are substantially the same as the outside diameter of the remainder of the pipe. It would have been an obvious matter of design choice to employ such single wall configurations at each end of the pipe since Applicant has not disclosed that doing so is for any particular purpose and it is apparent that Line's single wall configuration at each end of his pipe performs equally as well.

### ***Response to Arguments***

Applicant's arguments with respect to Baker have been considered but are moot in view of the new ground(s) of rejection.

Applicant's replies filed 12/12/05 and 3/15/06 do not point out how the language of at least claim 9 patentably distinguishes from **Line (US 690,744)**. Pursuant to 37 CFR 1.111(b), The reply must present arguments pointing out the specific distinctions

believed to render the claims, including any newly presented claims, patentable over any applied references...A general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references does not comply with the requirements of this section.

In Applicant's arguments with respect to Line on pages 10-12 of the reply filed 9/8/05, Applicant asserts that Line does not disclose inner and outer wall members and encased rib members are compressed to convert an end portion of a multiwall pipe having hollow space between the inner and outer tubular members into a single wall structure where the inner wall, outer wall and rib members are collectively compressed into a single wall structure. The Examiner disagrees. Refer to the above 35 USC 102(b) rejections in view of Line.

Regarding Applicant's assertions in the last paragraph on page 11, it should be noted that Line's inner tubular wall has been interpreted as that wall between member A and member 2. And also to note, Applicant, in this paragraph and subsequent paragraphs, asserts that Line does not disclose limitations that are not present in the claims rejected by Line.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

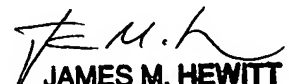
Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M. Hewitt whose telephone number is 571-272-7084.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Stodola can be reached on 571-272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
**JAMES M. HEWITT**  
**PRIMARY EXAMINER**